Approved for use through 06/30/2008, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE ction of information unless it displays a valid OMB control number <u>Under the Paperwork Reduction Act of 1995, no persons are regulred to respond to </u> Application Number 10/642,413 Filing Date TRANSMITTAL 08/15/2003 First Named Inventor FORM George Y. Husng Art Unit 2833 Examiner Name TSUKERMAN, LARISA Z. (to be used for all correspondence after initial filing) Attorney Docket Number Huang/Cont Raised Port Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Identify Terminal Disclaimer Extension of Time Request Request for Refund Express Abandonment Request CD, Number of CD(s) Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Remarks Document(s) Appeal Brief and fee Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Law Office of Duncan Palmatler Signature Printed name Duncan Palmatier Date Rea. No. June 18, 2008 40.759 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mall in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

First Named Inventor

George Y. Huang

Applicant

George Y. Huang

Application No.

10/642,413

Filed -

08/15/2003

For

ELECTRICAL CONNECTOR AND ADAPTER

STRUCTURE WITH RAISED PORTION

Group Art Unit

2833

Examiner
Attorney Docket

TSUKERMAN, LARISA Z. Huang/Cont Raised Port

Customer No.

26860

#### APPEAL BRIEF, 37 CFR 1.192

June 18, 2008

Mail Stop Appeal Brief - Patents Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 VIA FAX (703) 872-9306

#### Dear Commissioner for Patents:

Further to the Notice of Appeal, filed January 18, 2008, Appellant-Applicant George Y. Huang presents this Appeal Brief. Appellant respectfully requests that this appeal be considered by the Board of Patent Appeals and Interferences.

This Appeal Brief is submitted in triplicate, along with the following items:

- Transmittal Form (PTO/SB/21);
- Credit Card Payment Form (PTO 2038); and
- Appeal Brief.

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#### I. REAL PARTY IN INTEREST (37 CFR 41.37(c)(1)(i))

The subject patent application is owned by the inventor and applicant, George Y. Huang.

#### II. RELATED APPEALS AND INTERFERENCES (37 CFR 41.37(c)(1)(ii))

There are no related appeals or interferences pending.

The parent (application No. 09/657,869) of this continuation application was the subject of an appeal, No. 2002-1175, filed on October 3, 2001 ("first appeal"). The Board of Patent Appeals & Interferences (BPAI) rendered its Decision on Appeal on June 17, 2003 ("6/17/03 Decision"), affirming the rejections, as discussed in greater detail below. Following the 6/17/03 Decision, Appellant filed the underlying continuation application with amended claims. The amended claims were rejected and Appellant again appealed ("second appeal"). The BPAI rendered its Decision on the second appeal on January 31, 2007 ("1/31/07 Decision), affirming the rejections. The BPAI found that the application disclosed an invention that eliminated the need for a second temporal step in making or a second material in forming the disclosed electrical connector with a raised portion, but the claims at issue lacked the "temporal" or "material" limitations. Following the 1/31/07 Decision, Appellant continued prosecution of the application with amended claims and a new process claim, adding temporal and material limitations, to conform with the BPAI's 1/31/07 Decision. The Examiner thereafter objected to the new process claim, claim 17, under 35 USC §132(a), on the ground that the new process claim added material which was not supported by the original disclosure, and the Examiner rejected the claims as obvious, under 35 USC §103(a), based on the same argument. See April 20, 2007 Non-Final Action ("1/18/08 Final Non-Final Action"). Appellant respond on October

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22, 2007 ("10/22/07 Response"), by noting that no new matter had ever been added to the application and the §132(a) objection was, therefore, legally improper. Appellant also responded to the obviousness rejection by noting that the Examiner's arguments concerning lack of supporting disclosure failed to support a rejection under §103(a). On January 18, 2008, the Examiner issued a second and final Action ("1/18/08 Final Action"), supporting the rejection of the process claim on the ground that the "Examiner never examined any method claims and the applicant should not be entitled to now have method claims examined". See 1/18/08 Final Action, at 3. On April 18, 2008, Appellant filed a Notice of Appeal and this appeal followed ("instant appeal").

#### III. STATUS OF CLAIMS (37 CFR 41.37(e)(1)(iii))

Claims 1, 3 through 12, and 14 through 17 are pending, were rejected by the Examiner, and are the subject of this appeal.

As noted above, on March 20, 2007, following the 1/31/07 Decision of the BPAI, Appellant filed a Request for Continued Examination ("3/20/07 RCE"), along with amendments of claims 1, 3, 7, 11, 12, 14, 15 and 16, new process claim 17, and cancellation of claims 2 and 13. The claims presented by the 3/20/07 RCE have not been further amended and are at issue in this appeal.

#### IV. STATUS OF AMENDMENTS (37 CFR 41.37(c)(1)(iv))

All the pending claims, 1, 3 through 12, and 14 through 17, were amended in the 3/20/07 RCE, and claims 2 and 13 were canceled. At the time of filing of this brief, no amendments subsequent to the final rejection have been made. The Appendix hereto reflects the current state

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of the claims.

#### V. <u>SUMMARY OF CLAIMED SUBJECT MATTER (37 CFR 41.37(c)(1)(v))</u>

A concise explanation of the subject matters of independent claims 1, 12 and 17 is provided. Because this is a concise explanation, it does not attempt to explain all embodiments and alternative structures described in the specification. References are to page and line numbers of the specification as originally filed in the continuation application ("Specification"), or to the numbered paragraphs in United States Patent Publication No. 2004/53,533 ("Huang"). With respect to means-plus-function terms (35 USC §112,¶6), neither the independent nor the dependent claims at issue in this appeal contain such claim terms.

Generally, the invention relates to electrical connector and adapter structures used in the electronics industry. See Huang, at ¶ 0004. The invention discloses a connector or adapter housing structure that provides a raised portion that will be exposed after the outer plastic covering is molded onto the connector or adapter. Id. at ¶¶ 0016-18, and Fig. 2. This raised portion of the housing provides a place to incorporate designs, such as business logos or gripping surfaces, which can be formed as part of the raised portion. Id. at ¶¶ 0019 and 0021, and Figures 3 and 4.

The present invention eliminates the need to apply a logo through a second injection molding process or by affixing it in a later manufacturing step. <u>Id.</u> at ¶ 0007 (describing need for two-step molding process of prior art), and 0010 (invention eliminates second injection molding step). The raised portion of the present invention also provides a more discernable and durable surface for logos than the molded plastic covering. <u>Id.</u> Moreover, with transparent

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plastic coverings of recent designs, the raised portion of the present invention provides the best surface for logos or other information. <u>Id.</u> In this way, a cable connector or adapter can be manufactured and assembled with fewer parts and steps, and the finished product will provide a superior surface for logos and information. <u>Id.</u>

#### A. INDEPENDENT CLAIM 1

Independent claim 1 provides as follows:

1. An electrical connector structure comprising:

a housing formed of a material and having an outer surface and at least one end adapted to hold an electrical connector plug, wherein the housing has a raised portion, formed of said material along with the housing, that is above the outer surface of the housing,

a covering formed over the outer surface of the housing, wherein the covering is further formed around the raised portion so that an exposed part of the raised portion is not covered by the covering, wherein the exposed part of the raised portion further comprises a background surface and a design surface also formed of said material along with the raised portion and the housing, and

wherein the design surface is formed as part of the background surface and is not level with the background surface.

#### 1. "housing formed of a material having an outer surface"

One embodiment of the "housing formed of a material having an outer surface" is shown in Figure 2 as reference character 14. One description of this structure is provided in paragraph

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16 of the Description of the Invention. See Huang Publication, ¶ 0016; Specification at page 5, lines 4 through 11 (hereinafter, "5:4-11").

#### 2. "electrical connector plug"

One embodiment of the "electrical connector plug" 12 is shown in Figure 2. One description of this structure is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0016; Specification at 5:2-4.

#### 3. <u>"raised portion"</u>

One embodiment of the "raised portion" 17 is shown in Figure 2. One description of this structure is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0017; Specification at 5:4-11.

#### 4. "covering"

One embodiment of the "covering" 11 is shown in Figure 2. One description of this structure is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0018; Specification at 6:1-8.

#### 5. <u>"exposed part"</u>

One description of the "exposed part" is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0018; Specification at 6:3-8.

#### 6. "background surface"

One description of the "background surface" is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0019; Specification at 6:10-16.

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## 7. "design surface also formed of said material along with the raised portion and housing"

One description of the "design surface" and the formation of the design surface and raised portion and housing from one material is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶¶ 0010 and 0016; Specification at 6:13-16.

#### B. INDEPENDENT CLAIM 12

Independent claim 12 provides as follows:

#### 12. An electrical adapter structure comprising:

a housing formed of a material and having an outer surface and at least one end adapted to hold an electrical connector plug, wherein the housing has a raised portion, formed of said material along with the housing, that is above the outer surface of the housing,

a covering formed over the outer surface of the housing, wherein the covering is further formed around the raised portion so that an exposed part of the raised portion is not covered by the covering, wherein the exposed part of the raised portion further comprises a background surface and a design surface also formed of said material along with the raised portion and the housing, and

wherein the design surface is formed as part of the background surface and is not level with the background surface.

#### 1. "housing formed of a material having an outer surface"

One embodiment of the "housing formed of a material having an outer surface" is shown

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in Figure 2 as reference character 14. One description of this structure is provided in paragraph 20 of the Description of the Invention. See Huang Publication, ¶ 0020; Specification at 5:4-11.

#### 2. "electrical connector plug"

One embodiment of the "electrical connector plug" 12 is shown in Figure 2. One description of this structure is provided in paragraph 20 of the Description of the Invention. See Huang Publication, ¶ 0020; Specification at 5:2-4.

#### 3. "raised portion"

One embodiment of the "raised portion" 17 is shown in Figure 2. One description of this structure is provided in paragraph 21 of the Description of the Invention. See Huang Publication, ¶ 0021; Specification at 5:4-11.

#### 4. "covering"

One embodiment of the "covering" 11 is shown in Figure 2. One description of this structure is provided in paragraph 21 of the Description of the Invention. See Huang Publication, ¶ 0021; Specification at 6:1-8.

#### 5. <u>"exposed part"</u>

One description of the "exposed part" is provided in paragraph 21 of the Description of the Invention. See Huang Publication, ¶ 0021; Specification at 6:3-8.

#### 6. "background surface"

One description of the "background surface" is provided in paragraph 21 of the Description of the Invention. See Huang Publication, ¶ 0021; Specification at 6:10-16.

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7. "design surface also formed of said material along with the raised portion and housing"

One description of the "design surface" and the formation of the design surface and raised portion and housing from one material is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶¶ 0010 and 0020; Specification at 6:13-16.

#### C. INDEPENDENT CLAIM 17

Independent claim 1 provides as follows:

17. A method of manufacturing an electrical connector structure comprising the steps of:

in a first manufacturing step, forming a housing of a material, wherein the housing comprises an outer surface and at least one end adapted to hold an electrical connector plug, wherein the outer surface further comprises at least one face, and wherein a raised portion is formed of said material along with the housing, wherein the raised portion is raised above the face of the outer surface of the housing, and wherein the raised portion further comprises side walls extending up from the face and a background surface substantially parallel to the face and a design surface formed in the background surface, wherein the design surface is formed of said material along with the raised portion and the housing, and wherein the design surface is formed as part of the background surface and is not level with the background surface, and

in a second manufacturing step, forming a cover of a second material over the outer surface of the housing, wherein the cover is formed around the side

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walls of the raised portion.

#### 1. "first\_manufacturing step"

One description of the distinction between "first" and "second" manufacturing steps and the elimination of at least one manufacturing is described in paragraphs 10, 17, 18 and 19 of the Description of the Invention. See Huang Publication, ¶¶ 0010, and 0017-19.

2. "forming a housing of a material, wherein the housing comprises an outer surface"

One embodiment of the step of "forming a housing of a material, wherein the housing comprises an outer surface" is described in paragraph 16 of the Description of the Invention.

See Huang Publication, ¶ 0016; Specification at 5:4-11. One embodiment of the structure formed by this step is shown in Figure 2 as reference character 14.

#### 3. "electrical connector plug"

One embodiment of the "electrical connector plug" 12 is shown in Figure 2. One description of this structure is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0016; Specification at 5:2-4.

4. "raised portion is formed of said material along with the housing,
wherein the raised portion is raised above the face of the outer surface
of the housing"

One embodiment of the "raised portion" 17 is shown in Figure 2. One description of this structure is provided in paragraph 17 of the Description of the Invention. See Huang Publication, ¶ 0017; Specification at 5:4-11.

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5. "side walls extending up from the face and a background surface
substantially parallel to the face and a design surface"

One embodiment of the structure of the raised portion 17, along with its side walls and background surface, is shown in Figure 2. One description of this structure is provided in paragraph 17 of the Description of the Invention. See Huang Publication, ¶ 0017; Specification at 5:4-11. One description of the "side walls" and "background surface" is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0019; Specification at 6:10-16. One description of the "design surface" and the formation of the design surface and raised portion and housing from one material is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0010 and 0016; Specification at 6:13-16.

6. "design surface is formed of said material along with the raised

portion and the bousing, and wherein the design surface is formed as

part of the background surface and is not level with the background

surface"

One description of the "design surface" and the formation of the design surface and raised portion and housing from one material is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶¶ 0010 and 0016; Specification at 6:13-16. One description of the "side walls" and "background surface" is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0019; Specification at 6:10-16.

#### 7. "second manufacturing step"

One description of the distinction between "first" and "second" manufacturing steps and

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the elimination of at least one manufacturing is described in paragraphs 10, 17, 18 and 19 of the Description of the Invention. See Huang Publication, ¶ 0010, and 0017-19.

8. "Forming a cover of a second material over the outer surface of the housing, wherein the cover is formed around the side walls of the raised portion"

One embodiment of the "cover" 11 is shown in Figure 2. One description of this structure is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0018; Specification at 6:1-8. One description of the process of forming the cover over the outer surface of the housing around side walls of the raised portion is provided in paragraph 16 of the Description of the Invention. See Huang Publication, ¶ 0018; Specification at 6:1-8.

### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 CFR 41.37(c)(1)(vi))

- 1. Whether claim 17 is unpatentable under 35 U.S.C. § 132(a) because the "Examiner never examined any method claims and the applicant should not be entitled to now have any method claims examined." See 1/18/08 Final Action at 2-3, "Specification", § 1).
- Whether claim 17 is unpatentable under 35 U.S.C. § 132(a) as lacking support in the original disclosure for "first" and "second" manufacturing steps. See 1/18/08 Final Action at 3, "Specification", § 2).
- Whether claim 17 is unpatentable under 35 U.S.C. § 112, ¶ 1, for failing to comply with the written description requirement. See 1/18/08 Final Action at 4.

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- 4. Whether claims 1, 12 and 17 are unpatentable under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,704,091 to Owens et al. ("Owens"), because a third manufacturing step of etching or applying appliques "would have been obvious alterations since they are easily performed." See 1/18/08 Final Action at 5-6.
- 5. Whether claims 3 and 14 are unpatentable under 35 U.S.C. § 103(a) over Owens in view of U.S. Patent No. 4,256,159 to Williams ("Williams").
- 6. Whether claims 4 through 10 and 15 are unpatentable under 35 U.S.C. § 103(a) over Owens in view of Williams, and further in view of U.S. Patent No. 4,202,351 to Biche ("Biche"), U.S. Patent No. 4,275,768 to Riggs et al. ("Riggs"), and U.S. Patent No. 4,960,391 to Beinhaur et al. ("Beinhaur").
- 7. Whether claims 11 and 16 are unpatentable under 35 U.S.C. § 103(a) over Owens in view of U.S. Patent No. 4,164,725 to Wiebe ("Wiebe").

#### VII. <u>ARGUMENT (37 CFR 41.37(c)(1)(vii))</u>

#### A. INTRODUCTION

The Examiner objected to the application under 35 USC §132(a), on the ground that Appellant's claim amendments constituted the impermissible addition of "new matter into the disclosure". See 1/18/08 Final Action, at 2. As noted below, the Examiner has erroneously treated claim amendments as the addition of new matter into the disclosure. The Examiner's §132(a) objection is legally erroneous and is, further, actually a rejection under 35 USC § 112, first paragraph ("§112,¶1"). When properly considered under§112,¶1, the claim amendments

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find support in Appellant's original disclosure as understood by the Examiner's previous Actions

and the Board of Patent Appeals and Interferences ("BPAI") in the two appeals in this

application. In short, the Examiner has created a new theory that is contradicted by the

Examiner's own words.

The Examiner rejected the amended claims under 35 USC §103(a) as obvious over U.S. .

Patent No. 4,704,091 to Owens et al. ("Owens"). The Examiner's §103(a) rejection is not based on the language of the independent claims, but on the Examiner's new conclusion that Appellant's disclosure does not support the single-material and single-step limitations of the previously amended claims. Thus, the Examiner's rejection is, again, actually a rejection under §112,¶1. In supporting these rejections, the Examiner has raised an argument that is inconsistent with the Examiner's previous statements, the findings of the BPAI in the two appeals in this application, and the clear teaching of Appellant's disclosure. In light of the Examiner's erroneous and contradictory arguments, the rejections must be withdrawn.

#### B. PROCEDURAL BACKGROUND

In the July 14, 2005 Non-Final Office Action, the Examiner rejected the two independent claims 1 and 12 under 35 U.S.C. §102(b), as being anticipated by U.S. Patent No. 5,735,699 to Tan ("Tan"), and obvious over U.S. Patent No. 4,704,091 to Owens *et al.* ("Owens"). See July 14, 2005 Non-Final Office Action ("7/14/05 OA"), at 2-4. All the dependent claims were rejected under 35 U.S.C. §103(a), as being unpatentable over Owens in view of a variety of other patents.

Appellant appealed the 7/14/05 OA to the Board of Patent Appeals and Interferences

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("BPAI"). See Ex parte Huang, Appeal No. 2006-2187. On January 31, 2007, the BPAI issued its Decision on Appeal ("1/31/07 Decision"). In its 1/31/07 Decision, the BPAI overturned the Examiner's rejection based on the Tan reference. See 1/31/07 Decision, at 5. The BPAI affirmed the rejections based on the Owens reference. Id., at 5-11. The BPAI rejected Appellant's argument that the claims overcame the "later manufacturing step" problem of the prior art, because the claims did not include language of such a "later manufacturing step" limitation nor of how many steps were required to form the claimed surfaces. Id., at 7. The BPAI concluded that independent claims 1 and 12 included neither limitations relating to the time period during which surfaces are formed nor distinctions between the materials of which the surfaces are formed:

We find no temporal limitation as to the time of being "formed" or limitation that the surfaces are made of the same material so as to distinguish over the Examiner's reasonable claim interpretation and application of the prior art of Owens.

Id., at 9. The BPAI affirmed the rejections of most of the remaining dependent claims, noting that a "single step process" was not supported by the claim language. Id., at 9-10 (with respect to claims 3 and 14; "we do not find the argument to the single step process to be well supported in the claim language"), at 10 (with respect to claims 1, 3-10, and 15; "we do not find the argument to the single step process or elimination of multi-step processes to be well supported in the claim language"), at 10 (with respect to claims 4, 7, 8, and 15; "the molding of Biche would have suggested that a separate step of molding could be used with Owens"), and at 10-11 (with respect to claims 5, 6, 9, 10, and 11; "Appellant presents the same argument as above that the references do not disclose the claimed structure or process of manufacturing").

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On March 30, 2007, following the 1/31/07 Decision, Appellant filed a Request for Continued Examination ("RCE"), in which Appellant amended independent claims 1 and 12 in light of the BPAI's 1/31/07 Decision. In summary, the claims were amended to include the limitation that the "material" from which the housing is formed is the same material from which the design surface is formed. Further, the claim was amended to add the "temporal" limitation that the raised portion, background surface, and design surface are "formed along with the housing". In this way, the amended claims reflect the limitation that the design surface is formed of the same material as the housing, thereby distinguishing the invention from Owens, which teaches the use of a separate "informative plaque". See Owens, at Abstract ("a final yoke assembly is molded encompassing the ... informational plaque"); see also Col. 1:47-48 ("information plaques molded into the yoke"), Col. 1:59-60 ("a molded contact pin dot information plaque in the yoke"), Col. 3:50-58 ("[i]n forming outer yoke 14, a high grade polymer molding compound flows around and is molded to the inner yoke 12, around color coded alpha-numeric labeling inserts 28a-28n leaving the upper surface of the inserts 28a-28n exposed, around the raised planar informative plaque member 26, and around bottom elongated oval member 36 as illustrated in FIG. 3 also leaving their exterior surfaces exposed"), Col. 4:48-49 (dependent claim 4, "System of claim 1 including information plaque means molded into said outer yoke housing"), and Col. 4:60-62 (independent claim 4, "c. molding an outer yoke housing incorporating an information plaque and the inner yoke body of step (b)"). Owens' teaching reflects the problem of the prior art disclosed by Appellant:

To provide a place for a manufacturer's name or for part identification, the plastic covering 11 of conventional connectors is

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sometimes molded with a recess 20. In the recess 20, identifying logos, designs, words, or numbers are often formed in the molding process, leaving raised or indented surfaces (not shown) in the plastic covering 11. Or, a label (not shown) can be affixed in the recess 20 after molding. Some designs have a raised surface design by placing the cable connector 10 or adapter in a second injection mold and adding a second plastic surface 15. This two-step molding process allows different colors or textures of plastic to be used.

See Huang Publication, ¶ 0007 (emphasis added). In summary, Owens teaches and Huang discloses as prior art a multi-step and multi-material molding process to incorporate an "informational plaque" (Owens) or "raised surface design" (Huang's disclosure of prior art) into a final plastic connector. The amendments to claims 1 and 12 overcame the Examiner's rejection, in light of the 1/31/07 Decision of the BPAI, by clarifying the limitation that the claimed design surface is formed along with and of the same material as the housing.

Appellant's RCE also added a new independent claim 17 directed to the single step method of manufacturing taught by Appellant's invention. This claim recites a "first manufacturing step", which includes the formation, from a single material, of the housing, raised portion, and background and design surfaces, and a "second manufacturing step" of forming a cover, from a "second material", over the housing and around the raised portion. The new claim 17 addresses the manufacturing method to which the Appellant's invention may be directed.

As noted above, the BPAI rejected dependent claims 3-10 and 14-15 based upon the lack of limitation as to "time of being 'formed' or limitation that the surfaces are made of the same material". See 1/31/07 Decision, at 9. The amendments to independent claims 1 and 12, as well as the new independent claim 17, address these issues.

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The BPAI affirmed the Examiner's rejection of dependent claims 11 and 16, which claim a "gripping surface", citing lack of claimed structure. See 1/31/07 Decision, at 11. These claims were amended to clarify that the claimed "gripping surface" is formed of the same material and at the same time as the housing, raised portion and background and design surfaces. Also, these claims were amended to add the limitation that the gripping surface comprised "ridges", thereby identifying structure.

#### C. ARGUMENT

# 1. The Examiner's §132(a) Objection that Appellant "should not be entitled to now have method claims examined"

The Examiner objected to claim 17, under §132(a), on the ground that the "Examiner never examined any method claims and the applicant should not be entitled to now have method claims examined." See 1/18/08 Final Action, at 2-3, "Specification", § 1). The Examiner cited no authority for the unilateral decision to refuse to examine a properly presented claim. The Examiner's refusal to examine claim 17, because the "Examiner never examined any method claims", is without support and must be reversed.

# 2. The Examiner's \$132(a) Objection that Appellant's Original Disclosure Fails to Support "First" and "Second" Manufacturing Steps

The Examiner also objected to claim 17 on the ground that it is unpatentable under §132(a) as lacking support in the original disclosure for "first" and "second" manufacturing steps. See 1/18/08 Final Action at 3, "Specification", § 2). The Examiner asserted that

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Appellant's March 30, 2007 RCE and claim amendments ("3/30/07 Amendment") "introduces new matter into the disclosure." See 1/18/08 Final Action, at 2 (emphasis added). The Examiner did not identify new matter added to the disclosure, in violation of 35 USC §132(a), but, instead, pointed to the Appellant's amendments to the claims as the source of the objection. In fact, the prosecution history reflects that Appellant has never made an amendment to the disclosure and Appellant has never introduced new matter into the disclosure. Appellant's amendments to the claims did not fall within the restriction imposed by §132(a) and the Examiner's objection must be withdrawn.

The statute relied on by the Examiner provides as follows:

(a) Whenever, on examination, any claim for a patent is rejected, or any objection or requirement made, the Director shall notify the applicant thereof, stating the reasons for such rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application; and if after receiving such notice, the applicant persists in his claim for a patent, with or without amendment, the application shall be reexamined. No amendment shall introduce new matter into the disclosure of the invention.

See 35 USC §132(a) (emphasis added).

In connection with §132(a), Section 706.03(o) of the Manual of Patent Examining Procedure ("MPEP") explains (emphasis added): "35 U.S.C. 132 >(a)< should be employed as a basis for objection to amendments to the abstract, specification, or drawings attempting to add new disclosure to that originally disclosed on filing." Sec also MPEP 706.07(h), Subsection VII.

The Courts have ruled that §132(a) relates to "new matter" added to an application's

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disclosure, rather than claims. See Westphal v. Fawzi, 666 F.2d 575, 577 (CCPA 1981). In Westphal, the Court explained that later submitted claims are examined on the basis of adequacy of support in the original disclosure, and an amendment of a claim, or a later filed claim, does not constitute the addition of new matter within the meaning of §132. Id. Although introduction of new matter into the disclosure falls under the prohibition of §132, later submitted claims need only be reviewed for support in the original disclosure under § 112, first paragraph. Id.; see also Railroad Dynamics, Inc. v. A. Stucki Co., 727 F.2d 1506, 1517 (Fed.Cir. 1984) ("sole question" is whether the claims entered by amendment were supported by the disclosure in the original application).

The facts here identical to those in <u>In re Rasmussen</u>, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981), where the Examiner's objection of a claim amendment as adding new matter in violation of §132 was reversed. In that case, the examiner rejected the amended claim, saying the claim amendment broadened the scope of the original claims and constituted "new matter" prohibited by §132. <u>Id.</u>, 650 F.2d at 1213-14. The Examiner was affirmed by the Patent and Trademark Office Board of Appeals on the argument that allowance of the broader claim would be an enlargement of the scope of the "disclosure". <u>Id.</u> The Court of Appeals reversed the Board and explained that an objection that a claim amendment is not supported by the disclosure must be made under §112,¶1:

The proper basis for rejection of a claim amended to recite elements thought to be without support in the original disclosure, therefore, is § 112, first paragraph, not § 132. The latter section prohibits addition of new matter to the original disclosure. It is properly employed as a basis for objection to amendments to the abstract, specifications, or drawings attempting to add new

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disclosure to that originally presented.

Id., 650 F.2d at 1214-15.

The Examiner's §132(a) objection to claim 17 is legally improper and must be reversed.

## 3. The Examiner's §112, ¶1 Rejection Contradicts The Examiner's Previous Statements, As Well As The Statements of the BPAI

The Examiner rejected claim 17, under 35 USC §112, ¶1, on the ground that it contains subject matter that was not described in the original disclosure. This rejection contradicts the Examiner's previous statements, as well as the statements of the BPAI, with respect to the invention's single-step manufacturing process.

The first paragraph of Section 112 requires that claimed subject matter be supported in the specification. Id., 650 F.2d at 1214. In the present case, the Examiner now argues that Appellant's Specification does not have support for the claim limitation of forming the "design surface" in the same manufacturing step as the formation of the "background surface" of the "raised portion" of the "housing". See 1/18/08 Final Action, at 2-3, and at 11-12. Although the "one-step" manufacturing process has been consistently accepted by the Examiner and the BPAI throughout the lengthy prosecution and appeals, the Examiner has raised this argument for the first time. In support of this new argument, the Examiner quotes three passages from the Specification. Id. The Examiner's new argument relies on taking partial quotations from Appellant's Specification, avoiding the surrounding disclosure, imposing an unreasonable interpretation of the partial quotation, and generally ignoring the teaching of Appellant's disclosure. The Examiner relies on this erroneous interpretation in support of the §132 objection

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(see 1/18/08 Final Action, at 2-3), as well as in support of the §103 rejection (id., at 11-12). Therefore, the discussion below responds to both.

The basis of the Examiner's argument is that, contrary to all arguments made and considered previously by the Examiner, Appellant and BPAI, Appellant's disclosure requires two manufacturing steps to form a "design surface", such as a logo, in the "background surface" of the "raised portion" of the connector "housing": "to put any 'design' onto the raised portion takes another step and do [sic] not formed in the same step with the housing and the raised portion." Id., at 3 and 12 (emphasis added in bold, underlining in original). The Examiner misinterprets the teaching of Appellant's disclosure and argues that it teaches only placing designs "onto" the raised portion, thereby teaching a two-step manufacturing process identical to the Owens reference. The Examiner's argument fails because it contradicts the Examiner's previous understanding of the disclosure, as well as the BPAI's understanding of the disclosure. These understandings were consistent with Appellant's teaching; namely, the invention's disclosure teaches forming the "design surface" as part of the "raised portion" in a single

See, e.g., December 8, 2000 Non-Final Action (12/8/00 Action"), in the parent application, No. 09/657,869 ("Parent"), at 4 ("logos can be formed in the molding process"); February 27, 2002 Examiner's Answer ("2/27/02 Answer") in first appeal, No. 2002-1175, at 5-6 ("the Huang invention was conceived to overcome [sic] necessity of an additional molding step by incorporating a design into the raised portion of the connector housing when the housing is manufactured"; emphasis added by underlined italics, but bolded text is from original); January 6, 2004 Non-Final Action in the instant application ("1/6/04 Action"), at 3 (Owens does not teach a design surface formed as part of the background surface); July 14, 2005 Non-Final Action ("7/14/05 Action), at 11-12 (arguing that Appellant's single-step manufacturing process is an unpatentable "product by process"); and February 28, 2006 Examiner's Answer ("2/28/06 Answer") in the second appeal, No. 2006-2187, at 5 citing Owens as a §103 reference, rather than a §102 reference, because it does not teach forming the design surface as part of the background surface).

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manufacturing step, thereby overcoming the problems of the multiple steps required by the prior art.

During the first appeal in the prosecution of the Parent application, the BPAI made the following determination:

Appellant argues that the invention requires that the surface comprises a design formed as part of the surface and that the design is incorporated into the surface of the raised portion of the connector when the housing is manufactured thereby removing an additional molding step which would be required by Owens. [Citation to the brief omitted.] While we agree with appellant concerning the simplification of the manufacturing process, we find no limitation in the language of independent claim 1 to distinguish it from the connector/article of manufacture of Owens.

See June 17, 2003 Decision on Appeal of the BPAI in Ex Parte George Y. Huang, Appeal No. 2002-1175 ("6/17/03 Decision"), at 4-5 (emphasis added).

The BPAI's understanding that Appellant's disclosed invention simplifies the manufacturing process finds support in the Specification. The Specification's "Discussion of the Prior Art" identifies the problem of applying a "surface design" to a connector by means of a "two-step molding process". See Specification, at 2:19-23. To overcome this problem with the prior art, the invention proposed a single-step process to incorporate a design into the raised portion of the connector housing, thereby allowing the housing and the design to be molded as part of the same process:

The present invention provides a connector or adapter housing structure that provides a raised portion that will be exposed after the outer plastic covering is molded onto the connector or adapter. This raised portion of the housing exposes an area where logos or other information can be placed on or molded into the raised portion. This eliminates the need to

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apply a logo through a second injection molding process or by affixing it in a later manufacturing step. The raised portion also provides a more discernable and durable surface for logos than the molded plastic covering. Moreover, with transparent plastic coverings of recent designs, the raised portion of the present invention provides the best surface for logos or other information. In this way, a cable connector or adapter can be manufactured and assembled with fewer parts and steps, and the finished product will provide a superior surface for logos and information.

See Specification, at 3:17-4:4 (emphasis in bold and italics added). In support of the §132(a) objection and §103(a) rejection, the Examiner quoted only the second sentence from this passage (see 1/18/08 Final Action, at 2 and 11), and interpreted the sentence in isolation as meaning that a second manufacturing step is required to put a design "onto" the raised portion of the housing (id., at 3 and 12). To reach this erroneous interpretation, the Examiner has to ignore the following sentence, which explains that, by molding the design *into* the raised portion of the housing, a second manufacturing step is avoided.

In the "Description of the Invention", Appellant's disclosure teaches that the specifically disclosed embodiment shows a "single-piece, molded metal housing 14" (see Specification, at 5:10-11), with a "raised portion 17" that may be "formed as part of the molded metal housing 14":

A raised portion 17 of the housing 14 extends above the outer surface of the housing 14. In the embodiment shown in Fig. 2, the raised portion 17 is formed as part of the molded metal housing 14. It is also contemplated that the raised portion 17 could be applied to the housing 14 in other ways. For example, the raised portion 17 could be glued or soldered to the housing 14, or the raised portion 17 of the housing 14 could be formed as part of a stamping process. In any event, persons skilled in the art will recognize that a raised portion 17 may be incorporated into or formed onto a housing 14.

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Id., at 5:18-27 (emphasis added). Of significance in the passage quoted above is the description of the other possible ways by which the raised portion (17) could be "applied" to the housing (14), such as by gluing or soldering. These alternative embodiments distinguish between molding the raised surface (17) in one manufacturing step along with the housing (14) from "applying" the raised portion to the housing in a separate manufacturing step. In the present status of the claims being examined, the claim language is directed to the narrower teaching of a design surface, a raised portion and a housing formed of the same material (claim 1) and as part of a "first manufacturing step" (claim 17). As such, the Specification discloses this embodiment.

The Specification goes on to explain that the raised surface (17) provides a surface into which designs, such as logos, may be molded during manufacturing, providing a "clearly visible" place for the logo and thereby another problem of the prior art (designs molded into the housing cannot be seen clearly through transparent plastic coverings):

The raised surface 17 provides a place where logos or information may be placed. For example, Fig. 3 shows a completed cable connector with a logo 18 molded into the raised portion 17. Thus, after manufacturing and assembly, the cable connector will have a clearly visible area on the raised portion 17, not covered by the injection molded plastic covering 11, where a logo or information may be seen.

Id., at 6:10-18 (emphasis added in bold and italics). In support of the §132(a) objection and §103(a) rejection, the Examiner quoted the first and second sentences of this passage (see 1/18/08 Final Action, at 3 and 11), and interpreted the second sentence as meaning that a second manufacturing step is required so that the logo can be molded into the raised portion of the housing (id., at 3 and 12). To reach this erroneous interpretation, the Examiner has to ignore the

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Specifications related teachings, which explain that, by molding the design *into* the raised portion of the housing, a second manufacturing step is avoided. Moreover, the Examiner's new argument and the erroneous interpretation of the Specification contradict the Examiner's previous admissions that the disclosure teaches a single-step process of manufacturing a design into the raised portion during molding of the housing. See footnote 1, supra, e.g., 2/27/02

Answer in first appeal, No. 2002-1175, at 5-6 ("the Huang invention was conceived to overcome [sic] necessity of an additional molding step by incorporating a design into the raised portion of the connector housing when the housing is manufactured"; emphasis added by underlined italics, but bolded text is from original). In light of the Examiner's earlier understanding of the disclosed invention, the new argument is unfounded and contradictory. Moreover, the Examiner's erroneous interpretation directly contradicts the BPAI's understanding of the disclosure as teaching a single-step manufacturing process to overcome the disadvantages of the multi-step processes of the prior art. See 6/17/03 Decision, at 4-5.

The highlighted portion of the quotation from the Specification above identifies that Appellant's disclosure expressly teaches forming the "design surface" ("logo" in the preferred embodiment) as part of the raised portion (17) of the housing (14) in a single molding step. This teaching is repeated and further explained in connection with the Specification's description of an adapter according to the invention:

A raised portion 17 of the housing 14 extends above the outer surface of the housing 14. In the embodiment shown in Fig. 4, the raised portion 17 is formed as part of the molded metal housing 14. It is also contemplated that the raised portion 17 could be applied to the housing 14 in other ways, as mentioned above. Once the connectors 12 and 26, housing 14, and

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conductors 23 are assembled, plastic is usually injection molded over the assembly to form an outer plastic covering 11. According to the present invention, the raised portion 17 will not be covered by the injection molded plastic covering 11, but will be exposed. The raised portion 17 may be higher or a little lower than the outer covering 11, as described above. As with the cable connector 10 described above, the raised portion 17 of the adapter 27, shown in Fig. 4, may be used as a surface for molded logos or designs 18, labels (not shown), or a gripping surface (not shown).

Id., at 7:22-8:9 (emphasis in bold and italics added). In support of the §132(a) objection and §103(a) rejection, the Examiner quoted only the last sentence from this passage (see 1/18/08 Final Action, at 3 and 11), and interpreted the sentence in isolation as meaning that a second manufacturing step is required for molding logos or designs "onto" the raised portion of the housing (id., at 3 and 12). To reach this erroneous interpretation, the Examiner has to ignore the preceding teachings, which explain that, by molding the design *into* the raised portion of the housing, a second manufacturing step is avoided.

The Examiner's §132(a) objection was improper, insofar as it was applied to Appellant's amendments to the claims, rather than to the disclosure. No new matter has ever been introduced into the disclosure since the original Parent application was filed. To the extent the Examiner is attempting to argue that Appellant's disclosure fails to provide a written description, under §112,¶1, of a single-step manufacturing process to create an electrical connector with a design surface formed as part of a raised portion during the molding of the housing, the above-quoted portions of the Specification provide clear support for this teaching, to which the claims at issue are directed. To the extent the Examiner is attempting to argue that Appellant's amended claim is different from the previously presented claims, narrowing claim amendments are allowed. See

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Aerosol Research Co. v. Scovill Mfg. Co., 334 F.2d 751, 141 USPQ 758 (7th Cir. 1964).

For the reasons set forth above, the Examiner's objection under§132(a) was improper and must be reversed.

#### 4. The Examiner's §103(a) Rejection of Independent Claims 1, 12 and 17

The Examiner's §103(a) rejection is not based on the language of the claims being examined, but on the Examiner's interpretation of Appellant's disclosure. Thus, after quoting from "fragments" of Appellant's Specification, the Examiner argues that it fails to teach a single-step manufacturing process: "All those fragments show that to put any indicia/design surface onto the raised portion takes another step and do [sic] not formed in the same step with the housing and raised portion." See 1/18/08 Final Action, at 12 (italics added). The rejection is not based on §103(a), because it is not based on the language of the claims presented for examination in view of the prior art Owens reference. Rather, the rejection is based on an implied failure, under§112,¶1, to provide a written description to support the single-material and single-step limitation of the amended claims. This argument does not address the claims, but the disclosure, and is, therefore, incorrectly presented as an obviousness rejection under §103.

In response to the Examiner's new argument that Appellant's disclosure does not support the single-material and single-step limitations, as noted above in connection with the §132(a) objection, this argument was never raised before, contradicts the Examiner's previous arguments during prosecution of this application and its related appeals, and contradicts the findings of the

In fact, the Examiner has admitted throughout prosecution that Owens does not teach "a design surface ... formed as part of the background surface". See, e.g., 7/14/05 Action, at 4.

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BPAI. Accordingly, the Examiner's argument underlying the §103(a) rejection is based on an unsupported and inconsistent interpretation of Appellant's disclosure.

The Examiner now argues that the Appellant's disclosure does not disclose a design surface and raised portion that can be manufactured in a single manufacturing step along with the housing. The Examiner's new argument is that the underlying disclosure teaches two, separate manufacturing steps in order to mold a design "onto" the raised portion of the housing. See 1/18/08 Final Action, at 12. Based on this erroncous interpretation of Appellant's disclosure, the Examiner rejects the claims as obvious over the Owens reference, which admittedly teaches a multi-step manufacturing process. The Examiner's interpretation of Appellant's disclosure is directly contrary to its express teaching and contradicts the BPAI's previous findings.

The argument set forth in detail above in connection with the Examiner's §132(a) objection to the Specification applies to the identical argument made in support of the §103(a) rejection. Cf., 1/18/08 Final Action, at 2-3 (in connection with the §132(a) objection), and at 11-12 (in connection with the §103(a) rejection; the same argument is copied from one section to the other). For the reasons set forth above, the Examiner's new interpretation of Appellant's disclosure cannot stand and must be withdrawn. In light of the Examiner's erroneous new interpretation, the §103(a) rejection lacks support and must, too, be reversed.

Additionally, the Examiner has failed to take into consideration the findings and arguments of the BPAI in the second appeal. As noted in Appellant's Preliminary Amendments to the claims in support of its Request for Continued Examination, the BPAI found that the

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claims before it lacked "temporal" or "material" limitations to distinguish the disclosed single-step manufacturing process of the disclosed invention from the multi-step process required by the teaching of the Owens reference. See Appellant's March 30, 2007 Response to July 14, 2005 Action ("3/30/07 Response"), at 9-10. Appellant, therefore, amended the claims of the application, and added a process claim, to present claims consistent with the BPAI's finding.

Appellant appealed the 7/14/05 Action to the BPAI. In its 1/31/07 Decision, the BPAI rejected Appellant's argument that the claims overcame the "later manufacturing step" problem of the prior art, because the claims did not include language of such a "later manufacturing step" limitation nor of how many steps were required to form the claimed surfaces. <u>Id.</u>, at 7. The BPAI concluded that independent claims 1 and 12 included neither limitations relating to the time period during which surfaces are formed nor distinctions between the materials of which the surfaces are formed:

We find no temporal limitation as to the time of being "formed" or limitation that the surfaces are made of the same material so as to distinguish over the Examiner's reasonable claim interpretation and application of the prior art of Owens.

Id., at 9. The BPAI affirmed the rejections of most of the remaining dependent claims, noting that a "single step process" was not supported by the claim language. Id., at 9-10 (with respect to claims 3 and 14; "we do not find the argument to the single step process to be well supported in the claim language"), at 10 (with respect to claims 1, 3-10, and 15; "we do not find the argument to the single step process or elimination of multi-step processes to be well supported in the claim language"), at 10 (with respect to claims 4, 7, 8, and 15; "the molding of Biche would have suggested that a separate step of molding could be used with Owens"), and at 10-11 (with

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respect to claims 5, 6, 9, 10, and 11; "Appellant presents the same argument as above that the references do not disclose the claimed structure or process of manufacturing").

Appellant amended independent claims 1 and 12 in light of the BPAI's decision. Thus, the claims have been amended to include the limitation that the "material" from which the housing is formed is the same material from which the design surface is formed. Further, the claims have been amended to add the "temporal" limitation that the raised portion, background surface, and design surface are "formed along with the housing". In this way, the claims reflect the limitation that the design surface is formed of the same material as the housing, thereby distinguishing the invention from Owens, which teaches the use of a separate "informative plaque". See Owens, at Abstract ("a final yoke assembly is molded encompassing the ... informational plaque"); see also Col. 1:47-48 ("information plaques molded into the yoke"), Col. 1:59-60 ("a molded contact pin dot information plaque in the yoke"), Col. 3:50-58 ("[i]n forming outer yoke 14, a high grade polymer molding compound flows around and is molded to the inner yoke 12, around color coded alpha-numeric labeling inserts 28a-28n leaving the upper surface of the inserts 28a-28n exposed, around the raised planar informative plaque member 26, and around bottom elongated oval member 36 as illustrated in FIG. 3 also leaving their exterior surfaces exposed"), Col. 4:48-49 (dependent claim 4, "System of claim 1 including information plaque means molded into said outer yoke housing"), and Col. 4:60-62 (independent claim 4, "c. molding an outer yoke housing incorporating an information plaque and the inner yoke body of step (b)"). Owens' teaching reflects the problem of the prior art disclosed by Huang:

> To provide a place for a manufacturer's name or for part identification, the plastic covering 11 of conventional connectors is

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sometimes molded with a recess 20. In the recess 20, identifying logos, designs, words, or numbers are often formed in the molding process, leaving raised or indented surfaces (not shown) in the plastic covering 11. Or, a label (not shown) can be affixed in the recess 20 after molding. Some designs have a raised surface design by placing the cable connector 10 or adapter in a second injection mold and adding a second plastic surface 15. This two-step molding process allows different colors or textures of plastic to be used.

See Huang Publication, ¶ 0007 (emphasis added). In summary, Owens teaches and Appellant discloses as prior art a multi-step and multi-material molding process to incorporate an "informational plaque" (Owens) or "raised surface design" (Appellant's disclosure of prior art) into a final plastic connector. The amendments to claims 1 and 12 overcame the Owens reference, in light of the Decision of the BPAI, by clarifying the limitation that the claimed design surface is formed along with and of the same material as the housing.

Appellant also added a new independent claim 17 directed to the single step method of manufacturing taught by Appellant's invention. This claim recites a "first manufacturing step", which includes the formation, from a single material, of the housing, raised portion, and background and design surfaces, and a "second manufacturing step" of forming a cover, from a "second material", over the housing and around the taised portion. Thus, new claim 17 addresses the manufacturing method to which the Appellant's invention may be directed.

As noted above, the BPAI rejected dependent claims 3-10 and 14-15 based upon the lack of limitation as to "time of being 'formed' or limitation that the surfaces are made of the same material". See 1/31/07 Decision, at 9. The amendments to independent claims 1 and 12, as well as the new independent claim 17, address these issues.

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method to the single electrical connector structure disclosed and claimed by Appellant. As explained above, the rejected claims are distinguishable over the prior art, because they claim structures that overcome the problems of the prior art; namely, providing a design surface in which and onto which "logos or other information can be placed on or molded into", to overcome the multi-step molding and transparent plastic covering problems. See Huang Publication ¶ 0010, Specification, "Summary of the Invention", at 3:15-4:4. The Specification also explains that the claimed structure can provide a cable connector that "can be manufactured and assembled with fewer parts and steps", and a finished product with "a superior surface for logos and information." Id. Thus, the claimed structure and process for manufacturing that structure have expressly described advantages over the prior art.

The Examiner argues that Owens and Williams, as applied to dependant claim 3 above, further in view of U.S. Patent No. 4,275,768 to Riggs ("Riggs"), renders claim 5 obvious. See 1/18/08 Final Action, at 6. The Examiner argues that Owens and Williams are the primary references. However, as argued above, neither Owens nor Williams disclose the structure claimed by the Appellant. Riggs describes "engraving". As with Biche, the claimed single-material structure and single-step manufacturing process for manufacturing that structure have expressly described advantages over the prior art. Neither Owens nor Williams nor Riggs teach or suggest this structure or process.

The Examiner argues that Owens and Williams, as applied to dependant claim 3 above, further in view of U.S. Patent No. 4,960,391 to Beihaur et al. ("Beihaur"), render dependant claims 6 obvious. See 1/18/08 Final Action, at 7. The Examiner argues that Owens and

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The Examiner's §103(a) rejection is not based on the language of the claims being examined, but on the Examiner's incorrect and contradictory interpretation of Appellant's disclosure. Thus, after quoting from "fragments" of Appellant's Specification, the Examiner argued that it failed to teach a single-step manufacturing process: "All those fragments show that to put any indicia/design surface onto the raised portion takes another step and do [sic] not formed in the same step with the housing and raised portion." See 1/18/08 Final Action, at 12 (italics added). The rejection is not based on §103(a), because it is not based on the language of the claims presented for examination. Rather, the rejection is based on an implied failure, under §112,¶1, to provide a written description to support the claims.

Because the Examiner has previously admitted that the Owens reference does not teach "a design surface ... formed as part of the background surface" (see 7/14/05 Action, at 4), and because the previously amended claims clarify that the "design surface" formed in the "background surface" of the "raised portion" is formed from the same material (claims 1 and 12), and during the single "first manufacturing step" (claim 17), as the "housing", the claims are not rendered obvious by Owens.<sup>3</sup>

#### 5. §103(a) Rejection of Dependent Claims 3 and 14

The BPAI rejected dependent claims 3-10 and 14-15 based upon the lack of limitation as to "time of being 'formed' or limitation that the surfaces are made of the same material". See

The Examiner has dropped the obviousness rejection on the unsupported contention that the claimed "raised portion" structure is mere ornamentation, and, therefore, Owens anticipates it, even though the Examiner admits that Owens lacks the claimed structure. See 4/20/07 Non-Final Action, at 12; cf., 1/18/08 Final Action; see also 7/14/05 Action, at 10-11. The Examiner did not include this argument in the 2/28/06 Answer in the second appeal and it is, therefore, waived.

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Williams are the primary references. However, as argued above, neither Owens nor Williams disclose the single-material structure nor the single-step manufacturing process claimed by the Appellant. As with Biche, the claimed structure and process for manufacturing that structure have expressly described advantages over the prior art. Neither Owens nor Beihaur teach or suggest this structure or process.

#### 6. §103(a) Rejection of Dependent Claims 4 Through 10 and 15

Dependent claims 4 through 10 and 15 relate to the method by which a design, either subsurface (claims 4-6) or above surface (claims 7-10 and 15), is formed into the design surface. The Examiner rejected these claims by citing Owens as a primary reference and identifying various patents that teach different methods of molding (Biche), machining ((Riggs), or stamping (Beinhaur) designs into various surfaces. See 1/18/08 Final Action, at 6-7. In its 1/31/07 Decision, the BPAI found that these claims lacked limitations concerning the single-step manufacturing process and, therefore, were obvious. See 1/31/07 Decision, at 10 ("we do not find the argument to the single step process or elimination of multi-step processes to be well supported in the claim language"). The amendments to the base claims include the temporal and material limitations and, therefore, the Examiner's rejection is without support and must be reversed.

The Examiner argued that Owens in view of Biche renders claims 7, 8 and 15 obvious.

See 1/18/08 Final Action, at 7-8. The Examiner argues that Owens "discloses most of the invention ... except for a design surface is a surface formed in the background surface (top surface of 26) above the background surface." Id., at 7. The Examiner argues that Biche fills the

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gap by teaching a "cap" placed on top of the connector. However, as noted above, Owens does not teach the single-material structure or single-step manufacturing process claimed by the Appellant to overcome the problems of the prior art, such as the prior art shown in Owens and Biche. The molding structure of Biche involves "an identification cap 42" on a medical instrument. See Biche, at Col. 6:26 and Abstract ("identification means is disclosed for use with lead wires in electrocardiographic monitoring instruments"). The use of a molding a plastic "identification cap", taught by Biche, does not relate to the "housing" with a "raised portion" forming a "design surface" on which a design, such as a logo, can be molded in a sub-surface or above-surface design, as claimed here. Neither Owens nor Biche suggest molding a design as part of a raised portion of a housing, the very problem the present invention is intended to overcome. The Examiner's argument that molding is a well-known method of manufacture fails to overcome the step of applying this method to the single electrical connector structure disclosed and claimed by Appellant. As explained above, the rejected claims are distinguishable over the prior art, because they claim structures that overcome the problems of the prior art; namely, providing a design surface in which and onto which "logos or other information can be placed on or molded into", to overcome the multi-step molding and transparent plastic covering problems. See Huang Publication, ¶ 0010, Specification, "Summary of the Invention", at p. 3:15-4:4. The Specification also explains that the claimed structure can provide a cable connector that "can be manufactured and assembled with fewer parts and steps", and a finished product with "a superior surface for logos and information." Id. Thus, the claimed structure and process for manufacturing that structure have expressly described advantages over the prior art.

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The Examiner's §103(a) rejection is not based on the language of the claims being examined, but on the Examiner's incorrect and contradictory *interpretation* of Appellant's disclosure. Thus, after quoting from "fragments" of Appellant's Specification, the Examiner argued that it failed to teach a single-step manufacturing process: "All those *fragments* show that to put any indicia/design surface onto the raised portion takes another step and do [sic] not formed in the same step with the housing and raised portion." See 1/18/08 Final Action, at 12 (italics added). The rejection is not based on §103(a), because it is not based on the language of the claims presented for examination. Rather, the rejection is based on an implied failure, under §112,¶1, to provide a written description to support the claims.

Because the Examiner has previously admitted that the Owens reference does not teach "a design surface ... formed as part of the background surface" (see 7/14/05 Action, at 4), and because the previously amended claims clarify that the "design surface" formed in the "background surface" of the "raised portion" is formed from the same material (claims 1 and 12), and during the single "first manufacturing step" (claim 17), as the "housing", the claims are not rendered obvious by Owens.<sup>3</sup>

## 5. §103(a) Rejection of Dependent Claims 3 and 14

The BPAI rejected dependent claims 3-10 and 14-15 based upon the lack of limitation as to "time of being 'formed' or limitation that the surfaces are made of the same material". See

The Examiner has dropped the obviousness rejection on the unsupported contention that the claimed "raised portion" structure is mere ornamentation, and, therefore, Owens anticipates it, even though the Examiner admits that Owens lacks the claimed structure. See 4/20/07 Non-Final Action, at 12; cf., 1/18/08 Final Action; see also 7/14/05 Action, at 10-11. The Examiner did not include this argument in the 2/28/06 Answer in the second appeal and it is, therefore, waived.

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1/31/07 Decision, at 9. The amendments to independent claims 1 and 12, as well as the new independent claim 17, address these issues.

The BPAI affirmed the Examiner's rejection of dependent claims 11 and 16, which claim a "gripping surface", citing lack of claimed structure. See 1/31/07 Decision, at 11. These claims have been amended to clarify that the claimed "gripping surface" is formed of the same material and at the same time as the housing, raised portion and background and design surfaces. Also, these claims were amended to add the limitation that the gripping surface comprised "ridges", thereby identifying structure.

The Examiner argues that Owens, in view of U.S. Patent No. 4,704,091 to Williams ("Williams"), renders claims 3 and 14 (sub-surface limitation) obvious. See 1/18/08 Final Action, at 5. The Examiner admits that Owens does not disclose a design surface that is below the background surface, but argues that Williams' "tire applique" (see Williams, Abstract) teaches such a structure, and it would have been obvious to combine the references "in order to provide some identification information". Id. The Examiner goes on to explain that "how the design surface [is] arrange [sic], above or below the background surface, depend only from the method of forming the design surface by adding or subtracting material." Id. Again, the Examiner fails to appreciate that the multi-step manufacturing process necessary to create the laminate structure described in Williams:

In a preferred embodiment, the present invention comprises a tire applique having a first elastomeric layer, a second stamping layer secured to the first layer, and a data material layer stamped to the second layer. A backing material mounted to the first layer is removed and the applique is secured to a tire by a suitable adhesive. Other aspects of the present invention relate to the

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The Examiner argues that Owens, in view of Biche, as applied to dependant claim 7 discussed above, and further in view of Riggs renders claim 9 obvious. See 1/18/08 Final Action, at 8-9. The Examiner argues that Owens and Biche are the primary references. However, as argued above, neither Owens nor Williams disclose the single-material structure nor the single-step manufacturing process disclosed and claimed by the Appellant. Riggs describes "engraving". As with Biche, the claimed single-material structure and single-step manufacturing process for manufacturing that structure have expressly described advantages over the prior art. Neither Owens nor Biche nor Riggs teach or suggest this structure or process. These references merely describe the prior art which reflect the problem the claimed invention is intended to overcome.

The Examiner argues that Owens and Biche, as applied to dependant claim 7 discussed above, further in view of Beihaur render dependant claims 10 obvious. See 1/18/08 Final Action, at 9. The Examiner argues that Owens and Biche are the primary references. However, as argued above, neither Owens nor Biche disclose the single-material structure nor the single-step manufacturing process claimed by the Appellant. The claimed structure and process for manufacturing that structure have expressly described advantages over the prior art. Neither Owens nor Biche nor Beihaur teach or suggest this structure or process. In fact, these references merely describe the prior art which reflect the problem the claimed invention is intended to overcome.

The Examiner argues that Owens, in view of Wiebe, renders claims 11 and 9 (gripping surface), obvious. See 1/18/08 Final Action, at 9-10. The Examiner argues that Owens is the

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primary reference. However, as argued above, Owens does not disclose the single-material structure nor the single-step manufacturing process claimed by Appellant. The claimed structure and process for manufacturing that structure have expressly described advantages over the prior art. Neither Owens nor Wiebe teach or suggest this structure or process. The Examiner cited no suggestion or motivation to combine Owens with Wiebe. Rather, the Examiner improperly cited the desirability of providing a gripping surface (see 1/18/08 Final Action, at 10: "to permit one to better grip the connector") as the motivation to combine the references. This type of circular argument cannot form the basis of an obviousness rejection. Moreover, these references merely describe the prior art which reflect the problem the claimed invention is intended to overcome.

### 7. §103(a) Rejection of Dependent Claims 11 and 16

The Examiner argues that Owens, in view of Wiebe, renders claims 11 and 16 (gripping surface), obvious. See 1/18/08 Final Action, at 10-11. The Examiner rejected these claims by citing Owens as a primary reference and identifying a "gripping surface design" in Wiebe. Id., at 11. In its 1/31/07 Decision, the BPAI found that, before Appellant's 3/30/07 Amendments, these claims lacked structural limitation. See 1/31/07 Decision, at 10-11 ("we find that any surface that can be contacted is a gripping surface as recited in the claims, and we do not find that the claims recite any structure to accomplish or improve the gripping of the connector, such as, texture"). The amendments to the base claims include the structural limitation and, therefore, the Examiner's rejection is without support and must be reversed.

#### D. CONCLUSION

The Examiner's §132(a) objections were improperly based on Appellant's amendments

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to the claims, rather than the disclosure. The Examiner's reliance on that statute was erroneous

and must be reveresed. To the extent the Examiner's §132(a) objection was, in fact, a rejection

under §112,¶1, it fails because the Examiner's prior arguments, as well as the BPAI's findings,

contradict the Examiner's new interpretation of Appellant's disclosure.

The Examiner's §103(a) rejection was improperly based on the Examiner's interpretation

of Appellant's disclosure, rather than the language of the claims. As such, the rejection was not

one under §103(a), but under §112,¶1. The rejection fails, because the Examiner's prior

arguments, as well as the BPAI's findings, contradict the Examiner's new interpretation of

Appellant's disclosure.

The Examiner's rejection of the dependant claims are based on the improper and

incorrect arguments related to Appellant's disclosure and the Examiner's new interpretation of

that disclosure. As such, the rejections of the dependent claims are not supported and must be

reversed.

For the foregoing reasons, it is submitted that the Examiner's rejections are without legal

support, and reversal of the Examiner's decision is respectfully requested.

Dated: June 18, 2008

Respectfully submitted.

arian ,

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VIII. CLAIMS APPENDIX (37 CFR 41.37(c)(1)(viii))

The claims on appeal are as follows.

Claim 1: An electrical connector structure comprising:

a housing formed of a material and having an outer surface and at least

one end adapted to hold an electrical connector plug, wherein the housing

has a raised portion, formed of said material along with said housing, that

is above the outer surface of the housing,

a covering formed over the outer surface of the housing, wherein the

covering is further formed around the raised portion so that an exposed

part of the raised portion is not covered by the covering, wherein the

exposed part of the raised portion further comprises a background surface

and a design surface also formed of said material along with the raised

portion and the housing, and

wherein the design surface is formed as part of the background surface

and is not level with the background surface.

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Claim 2 (canceled)

Claim 3: The electrical connector structure of claim 1 wherein the design surface formed in the background surface of the exposed part of the raised portion is a sub-surface design below the background surface formed along with the housing and raised portion of said material.

Claim 4: The electrical connector structure of claim 3 wherein the sub-surface design is formed in the background surface of the raised portion of the housing during molding of the housing.

Claim 5: The electrical connector structure of claim 3 wherein the sub-surface design is formed in the background surface of the raised portion of the housing by machining.

Claim 6: The electrical connector structure of claim 3 wherein the sub-surface design is formed in the background surface of the raised portion of the housing by stamping.

Claim 7: The electrical connector structure of claim 1 wherein the design surface formed in the background surface of the exposed part of the raised portion

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is an above-surface design above the background surface formed along with the housing and raised portion of said material.

- Claim 8: The electrical connector structure of claim 7 wherein the above-surface design is formed in the background surface of the raised portion of the housing during molding of the housing.
- Claim 9: The electrical connector structure of claim 7 wherein the above-surface design is formed in the background surface of the raised portion of the housing by machining.
- Claim 10: The electrical connector structure of claim 7 wherein the above-surface design is formed in the background surface of the raised portion of the housing by stamping.
- Claim 11: The electrical connector structure of claim 1 wherein the design surface formed in the background surface of the exposed part of the raised portion is a gripping surface design formed along with the housing and raised portion of said material, wherein the gripping surface design comprises ridges.

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Claim 12: An electrical adapter structure comprising:

> a housing formed of a material and having an outer surface and at least one end adapted to hold an electrical connector plug, wherein the housing has a raised portion, formed of said material along with the housing, that is above the outer surface of the housing,

a covering formed over the outer surface of the housing, wherein the covering is further formed around the raised portion so that an exposed part of the raised portion is not covered by the covering, wherein the exposed part of the raised portion further comprises a background surface and a design surface also formed of siad material along with the raised portion and the housing, and

wherein the design surface is formed as part of the background surface and is not level with the background surface.

Claim 13: (canceled)

Claim 14: The electrical adapter structure of claim 12 wherein the design surface formed in the background surface of the exposed part of the raised portion

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is a sub-surface design below the background surface formed along with the housing and raised portion of said material.

- Claim 15: The electrical adapter structure of claim 12 wherein the design surface formed in the background surface of the exposed part of the raised portion is an above-surface design above the surface of the background surface formed along with the housing and raised portion of said material.
- Claim 16: The electrical adapter structure of claim 12 wherein the design formed in the background surface of the exposed part of the raised portion is a gripping surface design formed along with the housing and raised portion of said material, wherein the gripping surface design comprises ridges.
- Claim 17: A method of manufacturing an electrical connector structure comprising the steps of:

in a first manufacturing step, forming a housing of a material, wherein the housing comprises an outer surface and at least one end adapted to hold an electrical connector plug, wherein the outer surface further comprises at least one face, and wherein a raised portion is formed of said material along with the housing, wherein the raised portion is raised above 06/18/2008 15:44 17146412082 PAGE 49

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the face of the outer surface of the housing, and wherein the raised portion further comprises side walls extending up from the face and a background surface substantially parallel to the face and a design surface formed in the background surface, wherein the design surface is formed of said material along with the raised portion and the housing, and wherein the design surface is formed as part of the background surface and is not level with the background surface, and

in a second manufacturing step, forming a cover of a second material over the outer surface of the housing, wherein the cover is formed around the side walls of the raised portion.

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## IX. EVIDENCE APPENDIX (37 CFR 41.37(c)(1)(ix))

No evidence was submitted pursuant to 37 CFR §§ 1.130, 1.131, or 1.132, nor was evidence entered by the examiner and relied upon by Appellant in this appeal.

# X. RELATED PROCEEDINGS APPENDIX (37 CFR 41.37(c)(1)(x))

There are no related proceedings.